### FEDERAL COMMUNICATIONS COMMISSION

CLASS OF STATION FM

LCJ

30 38 43 96 21 26

16

|    | The follow     | wing appli | cation is submitted for action by the | Chief, Broadcast Bureau.                      |                 |
|----|----------------|------------|---------------------------------------|---|-----------------|
| ST | FILE NUMBER    | CALL       | APPLICANT AND LOCATION                | NATURE OF APPLICATION                         |                 |
|    |                |            |                                       |   |                 |
| ΤX | BPED -920413MF | NEW        | BRAZOS EDUCATIONAL RADIO              | CP FOR NEW EDUC FM STATION ON: 89.7 MHZ., ERP | : .200 KW (H&V) |

N/M 89.7MHZ COLLEGE STATION TX HAAT: 56 METERS (H&V)

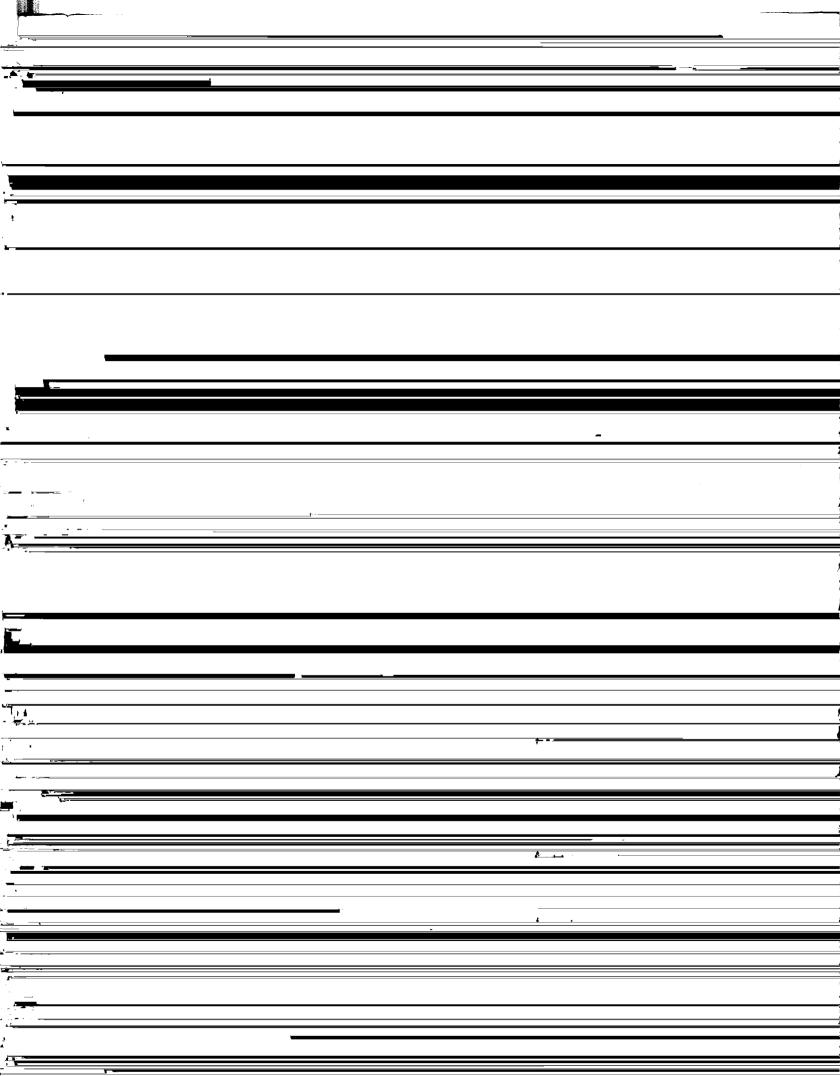
RECOMMENDATION: GRANT( ) CONSTRUCTION DATES, START END CONTESTED ( ) UNCONTESTED ( )

Je May

+

**APPROVED** 

FOR CHIEF, BROADCAST BUREAU



### FCC 340

Approved by OMB 3060-0034 Expires 4/30/92

See Page 23 for information regarding public burden estimate

### APPLICATION FOR CONSTRUCTION PERMIT FOR NONCOMMERCIAL EDUCATIONAL BROADCAST STATION

NONCOMMERCIAL EDUCATIONAL BROADCAST STATION Return only form to FCC (Carefully read instructions before filing form) CodE:30 Section 1 - GENERAL INFORMATION PN:4/24/92 Send notices and communications to the following person 1. Name of Applicant RECEIVED at the address below: Name BRAZOS EDUCATIONAL RADIO APR 1 3 1992 Eric Truax \*\* Street Address or P.O. Box Federal Communications Commission Street Address or P.O. Box Office of the Secretary P.O. Box 78 P.O. Box 78 State ZIP Code State ZIP Code 77841 College Station 77841 College Station TX Telephone No. Ilnclude Area Codel Telephone No. Linclude Area Code? (409) 846-7717 (409)846-7717 FM TV 2. This application is for: AM (a) Channel No. or Frequency City State (b) Principal 209 Community TX College Station (c) Check one of the following boxes: Application for NEW station MAJOR change in licensed facilities; call sign: MINOR change in licensed facilities; call sign; MAJOR modification of construction permit; call sign: File No. of construction permit: MINOR modification of construction permit; call sign: File No. of construction permit: AMENDMENT to pending application; application file number: NOTE: It is not necessary to use this form to amend a previously filed application. Should you do so, however, please submit only Section I and those other portions of the form that contain the amended information. Yes X No 3. Is this application mutually exclusive with a renewal application? Call letters Community of License If Yes, state: City State

\*\*copy to: Harry Cole, Bechtel & Cole, 1901 L Str., NW, Suite 250, Washington, DC 20036

| _  | ection II - LEGAL QUALIFICATIONS ame of Applicant   | · · · · · · · · · · · · · · · · · · · |
|----|---|---------------------------------------|
| _  | BRAZOS EDUCATIONAL RADIO  |                                       |
| 1  | . Applicant is: (Check one box below)   |                                       |
|    | (a) governmental or public educational agency, board or institution   |                                       |
|    | (b) private nonprofit educational institution   |                                       |
|    | (c) Other (specify) private nonprofit educational corporation   |                                       |
| 2  | For applicants 1(c) only, describe in an Exhibit the nature and educational purposes of the applicant.  | Exhibit No.                           |
| 3  | For applicants 1(c) applying for a new noncommercial educational television station only, describe in an Exhibit how the applicant's officers, directors and members of its governing board are broadly representative of the educational, cultural and civic segments of the principal community to be served.   | Exhibit No.                           |
| 4. | Describe in an Exhibit how the proposed station will be used, in accordance with 47 C.F.R. Section 73.503 or Section 73.621, for the advancement of an educational program.   | Exhibit No.                           |
| 5. | Is there any provision contained in any by-laws, articles of incorporation, partnership agreement, charter, statute or other document which would restrict the applicant in advancing an educational program or complying with any Commission rule, policy or provision of the Communications Act of 1934, as amended?  | Yes X N                               |
|    | If Yes, provide particulars in an Exhibit.  | Exhibit No.                           |
|    | CITIZENSHIP AND OTHER STATUTORY REQUIREMENTS  |                                       |
| 6. | (a) is the applicant in violation of the provisions of Section 310 of the Communications Act of 1934, as amended, relating to interests of aliens and foreign governments? (See Instruction B to Section II.)   | Yes X No                              |
|    | (b) Will any funds, credits or other financial assistance for the construction, purchase or operation of the station(s) be provided by aliens, foreign entities, domestic entities controlled by aliens, or their agents?   | Yes X No                              |
|    | If the answer to (b) above is Yes, attach an Exhibit giving full disclosure concerning this assistance.  N/A  | Exhibit No.                           |
| 7. | (a) Has an adverse finding been made or an adverse final action taken by any court or administrative body as to the applicant or any party to this application in a civil or criminal proceeding brought under the provisions of any law related to the following:  |                                       |
|    | Any falony; broadcast related antitrust or unfair competition; criminal fraud or fraud before another governmental unit; or discrimination?   | Yes X No                              |
|    | (b) Is there now pending in any court or administrative body any proceeding involving any of the matters referred to in (a) above?  | Yes X No                              |
|    | If the answer to (a) and/or (b) above is Yes, attach an Exhibit giving full disclosure concerning persons and matters involved, including an identification of the court or administrative body and the proceeding (by dates and file numbers), a statement of the facts upon which the proceeding is or was based or the nature of the offense alleged or committed, and a description of the current status or disposition of the matter. | Exhibit No.                           |

### PARTIES TO APPLICATION

8. Complete the following Table with respect to all parties to this application:

(NOTE: If the applicant considers that to furnish complete information would pose an unreasonable burden, it may request that the Commission waive the strict terms of this requirement with appropriate justification.)

INSTRUCTIONS: If applicant is a corporation or an unincorporated association with 50 or fewer stockholders, stock subscribers, holders of membership certificate or other ownership interest, fill out all columns, giving the information requested as to all officers, directors and members of governing board. In addition, give the information as to all persons or entities who are the beneficial or record owners of or have the right to vote capital stock, membership or ownership interests or are subscribers to such interests. If the applicant has more than 50 stockholders, stock subscribers or holders of membership certificates or other ownership interests, furnish the information as to officers, directors, members of governing board, and all persons or entities who are the beneficial or record owners of or have the right to vote 1% or more of the capital stock, membership or ownership interests. If applicant is a governmental or public educational agency, board or institution, fill out columns (a), (b), and (c) as to all members of the governing board and chief executive officers.

| Name and Residence Address(es)                                  | Office Held | Director or<br>Member of<br>Governing<br>Board | % of:<br>Ownership (O) or<br>Voting Stock (VS) or<br>Membership (M) |
|---|-------------|--|---|
|   | 4.          | YES NO   | ]   |
| (a)   | (b)         | (c)  | (d)   |
| JANINA R. HURTADO   | Director    | Х  | Does not apply  |
| 1010-B Foster<br>College Station, TX 77840                      |             |  | to nonprofit<br>corporation   |
| ERIC W. TRUAX<br>804-B Inlow Blvd.<br>College Station, TX 77840 | Director    | x  |   |
| ELIZABETH WEISSINGER<br>1010-A Foster                           | President   | x  |   |
| College Station, TX 77840                                       |             |  |   |
|   |             |  |   |
|   |             |  |   |
|   |             |  |   |
|   |             |  |   |
|   |             |  |   |
|   |             |  |   |

### Section II - LEGAL QUALIFICATIONS (Page 3)

| 9. | Does the applicant or any party to this application have, or have they had, any interest in:  |             |
|----|---|-------------|
|    | (a) a broadcast station, or pending broadcast station application before the Commission?  | Yes X No    |
|    | (b) a broadcast application which has been dismissed with prejudice by the Commission?  | Yes X No    |
|    | (c) a broadcast application which has been denied by the Commission?  | Yes X No    |
|    | (d) a broadcast station, the license of which has been revoked?   | Yes X No    |
|    | (e) a broadcast application in any pending or concluded Commission proceeding which left unresolved character issues against the applicant? | Yes X No    |
|    | If the answer to any of the questions in (a)-(e) above is Yes, state in an Exhibit the following information: $N/A$                         | Exhibit No. |

- (1) Name of party having interest;
- (2) Nature of interest or connection, giving dates;
- (3) Call letters of stations or file number of application or docket; and
- (4) Location.

### SECTION III - FINANCIAL QUALIFICATIONS

| Note: If this application                     | is for a change in an operatin  | g facility, DO NOT fill  | out this Section.  |   | •   |
|---|---|--|--|---|---|
| Is this application     Information Administ  | contingent upon receipt of ration?  | a grant from the N   | lational Telecommunica   | ations and  | Yes X No  |
|   | ontingent upon receipt of a gi<br>or university, or an appropriat   |  | -  |   | Yes X No  |
| committed or<br>no further ac<br>advise the F | stions 1 or 2 is answered "Ye appropriated. In the case of stion on your part is required. C.C. when the funds are contication, in triplicate, signed in the amended. | grants from the Nation<br>. If you rely on funds<br>n <b>mitted or appropriate</b> | al Telecommunications<br>from a source spec<br>d. This should be acc | and Information<br>ified in Question<br>complished by | on Administration,<br>ion 2, you must<br>letter amendment |
| sufficient funds are                          | ies, except as noted above,<br>available from committed sou<br>thout additional funds.  | •  |  |   | X Yes No  |
| SECTION IV - PRO                              | OGRAM SERVICE STATEME   | NT   |  | ·   |   |
| •   | a brief description, in narrative<br>oncern facing the proposed se  | •  | programming service  | relating to   | Exhibit No.   |

NOTE: No program service statement need be filed where the proposed station's programming would be wholly "instructional" as that type of programming is defined in the Instructions to this Section.

### SECTION VI - EQUAL EMPLOYMENT OPPORTUNITY PROGRAM 1. Does the applicant propose to employ five or more full-time employees? If Yes, the applicant must include an EEO program called for in the separate Broadcast Equal Employment Opportunity Program Report (FCC 396-A).

### SECTION VII - CERTIFICATION

1. Has or will the applicant comply with the public notice requirements of 47 C.F.R. Section 73.3580?

The APPLICANT hereby waives any claim to the use of any particular frequency as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application. (See Section 304 of the Communications Act of 1934, as emended.)

The APPLICANT acknowledges that all the statements made in this application and attached exhibits are considered material representations, and that all exhibits are a material part hereof and incorporated herein.

The APPLICANT represents that this application is not filed for the purpose of impeding, obstructing, or delaying determination on any other application with which it may be in conflict.

In accordance with 47 C.F.R. Section 1.65, the APPLICANT has a continuing obligation to advise the Commission, through amendments, of any substantial and significant changes in information furnished.

### WILLFUL FALSE STATEMENTS MADE ON THIS FORM ARE PUNISHABLE BY FINE AND IMPRISONMENT. U.S. CODE, TITLE 18, SECTION 1001.

I certify that the statements in this application are true and correct to the best of my knowledge and belief, and are made in good faith.

| Name of Applicant        | Title                       |
|--------------------------|-----------------------------|
| BRAZOS EDUCATIONAL RADIO | Eric W. Truax, Board Member |
| Signature E 1            | Date 4/10/92                |

### FCC NOTICE TO INDIVIDUALS REQUIRED BY THE PRIVACY ACT AND THE PAPERWORK REDUCTION ACT.

The solicitation of personal information requested in this application is authorized by the Communications Act of 1934, as amended. The principal purpose for which the information will be used is to determine if the benefit requested is consistent with the public interest. The staff, consisting variously of attorneys, analysts, engineers and applications examiners, will use the information to determine whether the application should be granted, denied, dismissed, or designated for hearing. If all the information is not provided, the application may be returned without action having been taken upon it or its processing may be delayed while a request is made to provide the missing information. Accordingly, every effort should be made to provide all necessary information. Your response is required to obtain the requested authority.

Public reporting burden for this collection of information is estimated to vary from 76 to 80 hours with an average of 78 hours 04 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, can be sent to the Federal Communications Commission, Office of Management and Budget, Paperwork Reduction Project (3060-0034), Washington, D.C. 20503.

THE FOREGOING NOTICE IS REQUIRED BY THE PRIVACY ACT OF 1974, P.L. 93-579, DECEMBER 31, 1974, 5 U.S.C. 552m(e)(3), AND THE PAPERWORK REDUCTION ACT OF 1980, P.L. 96-511, DECEMBER 11, 1980, 44 U.S.C. 3507.

### BRAZOS EDUCATIONAL RADIO EXHIBIT 1

NATURE OF APPLICANT April, 1992

Brazos Educational Radio is an educational nonprofit corporation formed for cultural and educational purposes with the specific purpose of operating a noncommercial educational radio station.

### BRAZOS EDUCATIONAL RADIO EXHIBIT 2

### ADVANCEMENT OF AN EDUCATIONAL PROGRAM April, 1992

The proposed station will provide a wide range of cultural and educational programming that is presently unavailable in the area, including programs for and by students, women and minorities.

The station will also be used for the advancement of educational programs by providing radio production training and airtime to members of the community (including, but not limited to, the student, university, and surrounding communities). It will provide continuing workshops, seminars and presentations on various aspects of radio broadcasting and the media. The station will seek to work with various departments of Texas A&M University in the advancement of these educational opportunities.

The proposed station will provide significant participatory educational opportunity to student groups, particularly from Texas A&M University, as well as opportunities to underserved minority and women's organizations and members of Texas A&M University's international student community.

### BRAZOS EDUCATIONAL RADIO EXHIBIT 3

### PROGRAM SERVICE STATEMENT April, 1992

The purpose of establishing the proposed station is to provide cultural and educational programming that is currently unavailable in the area. The station's programming policies will seek to meet the needs of underserved segments of the community, including the needs of students, women and minorities, as well as the general populace, and will serve as a local educational communications training resource for the community.

The station's programs will seek to provide insight and information about these underserved segments of the community and will be committed to providing news, live coverage of community events, information on local and regional governmental activities, coverage of Texas A&M University student activities, discussions of interest relating to the cultural and social diversity of the community, and cultural and instructional programming. Significant attention will be paid to issues of local concern, including those of students, women and minorities, as well as the general populace and will encourage community-wide discussion of these issues.

The programming policies of the proposed station will allow and encourage open discussion and investigation of any reasonable and responsible opinion or subject. The policies will seek to encourage a diversity of programming, including programs by and for women, minorities, students, and local arts organizations, with a high degree of community access to the station being encouraged to highlight the area's multicultural diversity.

### **CERTIFICATION OF SITE AVAILABILITY**

The applicant hereby certifies that it has reasonable assurance, in good faith, that the site or proposed structure proposed in Section V of its application, as amended, as the location of its transmitting antenna will be available to the applicant for the applicant's intended purpose.

This reasonable assurance is not based on the applicant's ownership of the proposed site or structure. The applicant hereby certifies that it has obtained such reasonable assurance by contacting the owner, the owner's agent, or a person possessing control of the site or structure.

> Name of person Contacted: LHARLES CULVER Telephone number: Owner Owner's Agent Other (specify)

> > ERIC TRUAX /BRAZOS FOUCHTIONAL RADIO BY: TITLE:

DATE:

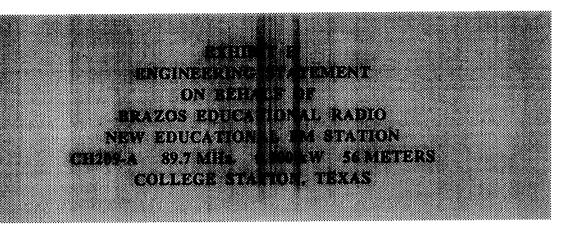
## ETHERE ENGINEERING STATEMENT ON REEL OF BRAZOS EDUCATION IL DIE STATION EN EDUCATION IL DIE STATION EN 89.7 MHL 100 V 56 METERS COLLEGE STATION, TEXAS

### TABLE OF CONTENTS

FCC FORM 340 SECTION VB

| INTRODUCTION                        |
|-------------------------------------|
| ALLOCATION STUDY                    |
| CHANNEL SIX INTERFERENCE STUDY      |
| ELEVATION AND CONTOUR DATA          |
| NON-IONIZING RADIATION CALCULATIONS |

AERONAUTICAL AND ENVIRONMENTAL IMPACT . . . . . . . . . . . . PAGE 6



### FIGURES INDEX

| FIGURE | 1.  | • |   |   |   |   |   | • | • | • | • |   |   | TRANSN | MITTER | SITE       | LC  | CATION | N MAP |
|--------|-----|---|---|---|---|---|---|---|---|---|---|---|---|--------|--------|------------|-----|--------|-------|
| FIGURE | 2 . |   |   | • |   |   |   |   |   |   |   |   |   |        | ALL    | OCATI      | ON  | STUDY  | MAP   |
| FIGURE | 2A  | • | • | • | • |   | ٠ |   | • |   |   |   |   |        | ALLO   | CATIO      | N   | STUDY  | DATA  |
| FIGURE | 3 . |   | • |   |   |   | • |   |   |   |   |   |   |        |        | . <b>A</b> | NIE | inna s | KETCH |
| FIGURE | 4 . | • |   |   |   | • |   |   | • |   |   | • |   |        |        |            | C   | ONTOUR | R MAP |
| FIGURE | 5 . |   |   |   |   |   |   |   |   |   | • | • |   | TV-6   | INTER  | FEREN      | ICE | STUDY  | MAP   |
| FIGURE | 5A  |   |   |   |   |   |   |   |   |   |   |   | • | TV-6   | INTER  | FEREN      | CE  | STUDY  | DATA  |
| FIGURE | 6.  |   |   |   | _ |   |   |   |   |   |   |   |   |        |        |            | CO  | NTOUR  | DATA  |

| Section                                | V-B - FM BROADCAST  | ENGINEERING D          | ATA                 | FOR COMMISSIO  File No.  ASB Referral Da  Referred by |                   |                      |
|--|---|------------------------|---------------------|---|-------------------|----------------------|
| Name of Appl                           | icant   |                        |                     | •   |                   |                      |
| Brazo                                  | s Educational Radio   |                        |                     |   |                   |                      |
| Call letters (i                        | f issued)   | is this applie         | cation being        | filed in response                                     | to a window?      | Yes X No             |
| None                                   |   | If Yes, spec           | cify closing        | date:   |                   |                      |
| Purpose of Ap                          | plication: leheck apprepriate   | besies??               |                     |   |                   |                      |
| X Const                                | ruct a new (main) facility  |                        | ☐ c∘                | nstruct a new auxi                                    | liary facility    |                      |
| Modify                                 | y existing construction permit  | t for main facility    | Mo                  | dify existing const                                   | ruction permit fo | r auxiliary facility |
| Modify                                 | licensed main facility  |                        | Mo                  | dify licensed auxilia                                 | ary facility      |                      |
| If purpose is t                        | o modify, indicate below the  | nature of change(s)    | and specify         | the file number(s)                                    | of the authorizat | ions affected.       |
| Antenr                                 | na supporting-structure heigh   | t                      | Eff                 | ective radiated pov                                   | ver               |                      |
| Antenr                                 | na height above average terrai  | in                     | Fre                 | quency  | •                 |                      |
| Antenr                                 | na location   |                        | Cla                 | SS  |                   |                      |
| Main S                                 | Studio location   |                        | Oth                 | er (Summarize brie:                                   | flyl              |                      |
| File Number                            | (s)   |                        |                     |   | Class (check eni  | u ene hez heleni     |
| Channel No.                            |   | I community to be s    | erved:              |   |                   | · — —                |
| 209                                    | City College Station  | County<br>Brazos       |                     | TX .  | - سا              | 1                    |
| 2614 Mal<br>(b) Geographi<br>Otherwise | on of antenna.  ddress, city, county and state oney St., Bryan, Bra cal coordinates (to nearest so , specify tower location. Spengitude will be presumed. | zos County, Tex        | cas<br>on element c | of an AM array, spo                                   | acify coordinates | of center of array.  |
| Latitude                               | 30 38   | 43                     | Langitude           | <b>9</b> 6  | 21                | 26                   |
| . is the suppo<br>application(s)       | rting structure the same as ti<br>?   | hat of another station | (s) or prop         | osed in another pe                                    | nding             | X Yes No             |
| If Yes, give                           | call letter(s) or file number(s   | ) or both.             | K63DL               | File # BLTT-8   | 80408IE           |                      |
|  | involves a change in height ourtenances, and lighting, if an  |                        |                     | existing height abov                                  |                   | cluding antenna,     |

SECTION V-B - FM BROADCAST ENGINEERING DATA (Page 2)

\*Polarization

|  | SECTION V-B - TM BROADCAST ENGINEERING DATA (Page 3)  |             |
|--|---|-------------|
|  | 10. is a directional antenna proposed?  | Yes X No    |
|  | If Yes, attach as an Exhibitastatement with all data specified in 47 C.F.R. Section 73.316, plot(s) and tabulations of horizontally and vertically polarized radiated components in terms of field.   |             |
|  | 11. Will the main studio be located within the 70 dBu or 3.16 mV/m contour?   | Yes X No    |
|  | If No, attach as an Exhibit justification pursuant to 47 C.F.R. Section 73.1125. Studio to be located within city of license pursuant to 73.1125 (A) (of the Rules.   | Exhibit No. |
|  | 12. Are there: (a) within 60 meters of the proposed antenna, any proposed or authorized FN transmitters, or any nonbroadcast <i>leacept citizens band or anather?</i> radio stations; or (b) within ten (10) kilometers of the proposed antenna, any facilities, or populated areas; or (c) within ten (10) kilometers of the proposed antenna, any | rithin the  |
| 7  |   |             |
| * ************************************       |   |             |
|  | · · · · · · · · · · · · · · · · · · ·   |             |
|  |   |             |
| <b>.</b> .                                   |   |             |
|  |   |             |
| <u>.</u>                                     | ·v  |             |
| <u> </u>                                     |   |             |
| ; <u>***</u>                                 |   |             |
|  |   |             |
|  |   |             |
| <b>I</b>                                     |   |             |
| †  |   |             |
| <u> </u>                                     |   |             |
| <u>-</u><br>                                 |   |             |
| _  | j.  |             |
| ŧ :  |   |             |
| . · <b>i</b> _                               | ,   |             |
|  | ·   |             |
| ÷.   | <u>*</u>  |             |
| ·  |   |             |
|  |   |             |
|  |   |             |
| }:. <del>▼</del> ~                           |   |             |
| 11   |   |             |
| <u>.                                    </u> | <u> </u>  |             |
|  |   |             |
|  |   |             |
| 7  |   |             |
|  |   |             |
| • <b>•</b>                                   |   |             |
| <b>!</b>                                     |   |             |

60

54

61

72

63

47

| Chart er equive     |  | h as an Exhibit a map (Sectional Aeronoutical ately, and with latitude and longitude markings | Exhibit No. |
|---------------------|--|---|-------------|
| (a) the proposed    | d auxiliary 1 mV/m contour; and  |   |             |
|                     | the file number of the license.  | which the applied-for facility will be auxiliary.<br>See 47 C.F.R. Section 73.1675. (File     |             |
| 18. Terrain and cov | prage data its be calculated in accordance s                                 | ith 47 C.F.R. Section 73.3131.  |             |
| Source of terr      | nin data: (check only one bex below)   |   |             |
| X Linearly in       | terpolated 30-second database  | 7.5 minute topographic map  |             |
| (Source:            | NGDC   |   |             |
| Other (&r           | iefly summerizel.  |   |             |
| Radial bearing      | Height of radiation center above average elevation of radial from 3 to 16 km | Predicted Distances to the 1 mV/m contour   |             |
| (degrees True)      | (meters)   | (kilometers)  |             |
| 0                   | 41   | 7.9   | •           |
| 45                  | 51   | 8.8   |             |

9.5

9.1

9.6

10.4

9.8

8.5

### Allocation Studies (See Subport C of 47 C.F.R. Port 73)

| 19 | . Is the proposed the United States | antenna location within 320 kilometers (199 miles) of the common border between $\cdot$ [ $\!\!\!$ s and Mexico? | Yes X N            |
|----|-------------------------------------|--|--------------------|
|    | •                                   | America and the United Mexican States concerning Frequency Modulation Broadcasting                               | Exhibit No.<br>N/A |

90

135

180

225

270

315

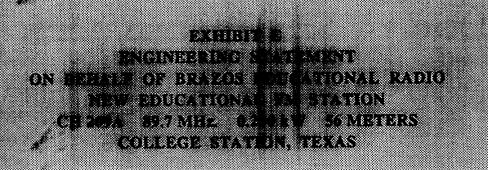
| 20. is the proposed antenna location within 320 kilometers of the common border between the United States and Canada?  | Yes X            |
|--|------------------|
| If Yes, attach as an Exhibit a showing of compliance with all provisions of the Working Agreement for Allocation of FM Broadcasting Stations on Channels 201-300 under The Canada-United States FM Agreement of 1947.  | Exhibit No. N/A  |
| 21. If the proposed operation is for a channel in the range from channel 201 through 220 (88.1 through 91.9 MHz), or if this proposed operation is for a class D station in the range from Channel 221 through 300 (92.1 through 107.9 MHz), attach as an Exhibit a complete allocation study to establish the tack of prohibited overlap of contours with other U.S. stations. The allocation study should include the following:   | Exhibit No.<br>E |
| <ul> <li>(a) The normally protected interference-free and the interfering contours for the proposed operation along all azimuths.</li> <li>(b) Complete normally protected interference-free contours of all other proposals and existing stations to which objectionable interference would be caused.</li> <li>(c) Interfering contours over pertinent arcs of all other proposals and existing stations from which objectionable interference would be received.</li> <li>(d) Normally protected and interfering contours over pertinent arcs, of all other proposals and existing stations, which require study to show the absence of objectionable interference.</li> <li>(e) Plot of the transmitter location of each station or proposal requiring investigation, with identifying call letters, file numbers and operating or proposed facilities.</li> <li>(f) When necessary to show more detail, an additional allocation study will be attached utilizing a map with a larger scale to clearly show interference or absence thereof.</li> <li>(g) A scale of kilometers and properly labeled longitude and latitude lines, shown across the entire Exhibit(s). Sufficient lines should be shown so that the location of the sites may be verified.</li> <li>(h) The name of the map(s) used in the Exhibit(s).</li> </ul> |                  |
| 22. With regard to any stations separated by 53 or 54 channels (10.6 or 10.8 MHz) attach as an Exhibit information required in 1/ (separation requirements involving intersediate frequency (i.f.) interference).  | Exhibit No.      |
| 23.(a) is the proposed operation on Channel 218, 219, or 220?  | Yes X No         |
| (b) If the answer to (a) is yes, does the proposed operation satisfy the requirements of 47 C.F.R. Section 73.207?   | Yes No           |
| (c) If the answer to (b) is yes, attach as an Exhibit information required in 1/ regarding separation requirements with respect to stations on Channels 221, 222 and 223.  | Exhibit No. N/A  |
| (d) If the answer to (b) is no, attach as an Exhibit a statement describing the short spacing(s) and how it or they arose.   | Exhibit No. N/A  |
|  |                  |

<sup>1/</sup> A showing that the proposed operation meets the minimum distance separation requirements, include existing stations, proposed stations, and cities which appear in the Table of Allotments; the location and geographic coordinates of each antenna, proposed antenna or reference point, as appropriate; and distance to each from proposed antenna location.

SECTION V-B - FM BROADCAST ENGINEERING DATA (Page 6) (e) If authorization pursuant to 47 C.F.R. Section 73.215 is requested, attach as an Exhibit a complete Exhibit No. N/A engineering study to establish the lack of prohibited overlap of contours involving affected stations. The engineering study must include the following: (1) Protected and interfering contours, in all directions (360%), for the proposed operation. (2) Protected and interfering contours, over pertinent arcs, of all short-spaced assignments, applications and allotments, including a plot showing each transmitter location, with identifying call letters or file numbers, and indication of whether facility is operating or proposed. For vacant allotments, use the reference coordinates as transmitter location. (3) When necessary to show more detail, an additional allocation study utilizing a map with a larger scale to clearly show prohibited overlap will not occur. (4) A scale of kilometers and properly labeled longitude and latitude lines, shown across the entire exhibit(s). Sufficient lines should be shown so that the location of the sites may be verified. (5) The official title(s) of the map(s) used in the exhibits(s). X Yes 24. is the proposed station for a channel in the range from Channel 201 to 220 (88.1 through 91.9 MHz) and the proposed antenna location within the distance to an affected TV Channel 6 station(s) as defined in 47 C.F.R. Section 73.525? Exhibit No. If Yes, attach as an Exhibit either a TV Channel 6 agreement letter dated and signed by both parties or G a map and an engineering statement with calculations demonstrating compliance with 47 C.F.R. Section 73.525 for each affected TV Channel 6 station. 25. Is the proposed station for a channel in the range from Channel 221 to 300 (92.1-107.9 MHz)? Exhibit No. If Yes, attach as an Exhibit information required in 1/. (Except for Class & (secondary) proposals.) N/A 26. Environmental Statement Would a Commission grant of this application come within Section 1.1307 of the FCC Rules, such that it may have a significant environmental impact? If you answer Yes, submit as an Exhibit an Environmental Assessment required by Section 1.1311. Exhibit No. N/A If No, explain briefly why not. Proposal is categorically excluded from environmental processing pursuant to Section 1.1306 of FCC Rules. CERTIFICATION I certify that I have prepared this Section of this application on behalf of the applicant, and that after such preparation, I have

examined the foregoing and found it to be accurate and true to the best of my knowledge and belief.

| Name (Typed or Printed) | Relationship to Applicant le.g., Lensulting Engineer!                                     |
|-------------------------|---|
| Kenneth Devine          | Telecommunications Consultant   |
| Signature               | Address (Inclode 219 Code) Broadcast Technical, Inc. P.O. Box 13475 New Orleans, LA 70185 |
| Date                    | Telephone No. (Include Area Code)   |
| April 9, 1992           | (504) 866-3846  |



### **INTRODUCTION**

This engineering statement, together with Section V-B of FCC Form 340 to which it is attached as Exhibit E, furnishes technical data in support of an application by Brazos Educational Radio for a new Educational FM broadcast facility licensed to College Station, Texas.

All calculations, contours and other technical information contained in or attached to this statement have been determined in accordance with the existing rules of the Federal Communications Commission (FCC Rules).

### **ALLOCATION STUDY**

Figures 2, and 2A of this exhibit present the results of a detailed channel

### CHANNEL SIX INTERFERENCE STUDY

In accordance with Section 73.525(a)(1) of the Commission's Rules, a study was conducted to determine whether the proposed facilities would affect any existing or proposed Channel 6 operations. The closest known Channel 6 operation is KCEN-TV which is licensed to Temple-Waco, Texas, and is within 196 kilometers of the proposed operation.

73.525(e)(3)(i) states that population of areas within the Grade A contour of a translator station carrying the affected Channel 6 station in an area of interference to Channel 6 may be subtracted from the total count of population receiving interference from the Educational FM station. In this case, there is a translator (K63DL) which carries the KCEN-TV signal.

The applicant proposes to locate on the same tower as K63DL. As shown in Figure 5, given the ERP and HAAT propsed in the instant application, the resultant interference area lies entirely within the Grade A contour of K63DL. The interference area was calculated using a computer method which is in accordance with the procedures outlined in Section 73.525 of the Commission's rules. The tabulated data utilized to prepare Figure 5 is presented in Figure 5A.

Accordingly, the affected population receiving interference from the proposed Educational FM station would therefore be zero pursuant to 73.525(e)(2) and 73.525(e)(3). Whereas the actual affected population residing within the interference area is less than 3,000 persons, it is believed that the facilities proposed in this application are substantially in compliance with all provisions of Section 73.525 of the Commission's Rules.

### **ELEVATION AND CONTOUR DATA**

The average elevations from three to sixteen kilometers from the proposed site along the eight required radials were determined using a computer method in accordance with the procedures specified in Section 73.312(d) using the 30 Second Point Data File of the National Geophysical Data Center.

Figure 6 is a tabulation of average elevations, effective antenna heights and distances to the 60 dBu coverage contours and the 100 dBu, 80 dBu, 54 dBu and 40 dBu interference contours. The contour data of Figure 6 were determined through a computer method similar to the method outlined in Section 73.313 of the FCC Rules.

The proposed 1.0 mV/m (60 dbu) contour has been plotted from the data in Figure 6, and is shown on the coverage map attached as Figure 4.

### NON-IONIZING RADIATION CALCULATIONS

In accordance with the Commission's rules, an assessment was made of the proposed facility's radio frequency radiation levels. Table 1 of OST Bulletin No.65 dated October 1985 was utilized to determine that the proposed facility would not exceed any standards for radio frequency radiation as defined by ANSI C95.1-1982.

Listed below is the methodology utilized to determine that the construction of the proposed facilities would not constitute a radiation hazard pursuant to the Commission's rules currently in effect.

Applicant is proposing to locate at a site occupied by an existing TV station.

An analysis of RF radiation at the site was performed using the outline given in OST Bulletin 65 dated October, 1985. The general analysis was done by making certain assumptions, then calculating the power density at ground level and finding the per-

centage of the allowable level. These various contributing percentages were added to get the final percentage of allowable radiation.

It was assumed that if the final percentage was less than 100%, then the addition of proposed operation to the site would present no radiation hazard. As will be demonstrated, the proposed facility adds 0.63% to the final total of 0.85%. Thus the addition of proposed operation to the site would present no radiation hazard.

### The following assumptions were made for the FM analysis:

- 1. All FM facilities within 1 km. are considered to be at the same site as the proposed site.
- 2. All FM stations were considered to be circularly polarized.
- 3. Worst case downward radiation was used.
- 4. Stations located more than 1 km. from the site are not included in the analysis.
- 5. S, the power density at ground level was calculated using the following formula:

$$S = \frac{(0.64) (1.64) (Power) (1000)}{(\Pi)(Distance)^2}$$

Where:

S = Power Density at ground level in milliwatts/square centimeter

 $\Pi = 3.1416$ 

# Power = total power in watts R - distance from base of tower to center of radiation in cm